

ABSTRACT OF THE DISCLOSURE

A composition for chemical mechanical polishing that includes a slurry is described. A sufficient amount of a selectively oxidizing and reducing compound is provided to produce a differential removal of a metal and a dielectric material. A pH adjusting compound adjusts the pH of the composition to provide a pH that makes the selectively oxidizing and reducing compound provide the differential removal of a metal and a dielectric material. A composition may include an effective amount of an hydroxylamine compound, ammonium persulfate, a compound which is an indirect source of hydrogen peroxide, and a peracetic acid or periodic acid. A method for chemical mechanical polishing is described which includes applying a slurry that includes the composition to a surface to produce mechanical removal of the metal and dielectric material.